PRG01 : let's travel!

==========*overview*

As we will be using the Android SDK as a platform for creating our smartwatch interactions for the rest of the semester, the goal of this assignment is to get you ***up and running with a development environment*** and to help you spread your design wings on mobile platforms.

==========*the assignment*

When people travel to a foreign place or an ethnic neighborhood, they often find it convenient and kind to be able to say a few basic things in the local language. Even if they aren't fluent, life is much easier if a few everyday interactions can be performed through words instead of gesturing. Your first assignment is to create a translation application that will help visitors get through some basic interactions.

Note that we are going to do peer evaluations of your progress on this assignment in studio Thursday. This means **you must have something to show by 10:30 on Thursday**! It's ok if it's just some sketches or a storyboard.

==========*details*

First you'll need to get your development environment up and running.

1. Choose a development machine: You should be able to do development on your own laptop and we expect that most people will want to do this. Android has good support for Windows, Mac and Linux.
2. Install the Android Studio and development tools: section this week will cover how to do this on your own machine. We recommend using Android Studio as your IDE. You can also build Android applications through the command line and Eclipse, but we will not be able to help you with this process.

Your application must allow users to enter a phrase and choose a to and from language for translation. We expect you to support at least three languages (English, Spanish, and Mandarin) and at least five phrases (hello, how much?, please, thank you, and goodbye). Google Translate can help you with these translations if necessary.

One possible way to break down your application is as follows (where the main view is the translator):

- a dropdown to select a from->to language pair (e.g., Spanish=>English)
- a radio button to select a phrase (e.g., “Hola”)
- a text field to display the translated phrase (“Hello”)
- a “translate” button to update the translation

This is by no means a brilliant design for a translation application. You are free to design your application as you see fit, as long as it fulfills the language and phrase criteria above.

You must submit your ***source code***, the ***executable***, ***screenshots*** and a ***narrated video***. It is your responsibility to ensure that the executable has all the resources it needs to execute.

==========*grading criteria*

Full credit (20 points) will be given if your application compiles, runs, contains the functionality as detailed in the instructions, and your documentation (writeup, photos, video) is complete.

Up to 5 extra points will be given if you implement additions that make the application more usable or more aesthetically pleasing. For example, you can implement the following:

- Enable translations between one language and all other languages at once
- Allow alternative entry of all phrases (e.g., users may type “Hello” or use speech-to-text and say “Hello”)
- Provide improved visuals and aesthetic iconography
- Enable orientation (i.e., make app viewable in portrait and landscape mode)

======*submission instructions*

We will be using hackster.io to upload materials in an easy-to-read and visually consistent way. Use this assignment information as a guide to ensure that all the relevant grading criteria can be easily found.

For peer evaluations, bring your laptop (running any code you've written) and/or design sketches to studio on Thursday. We will be discussing them in small groups.